1. A flexible fuel hose having improved fuel vapor barrier properties, said hose comprising a plurality of tubular structures, comprising:

a first tubular structure comprising a fluoropolymer barrier layer formed from a blend of about 5 to 95 weight percent of a first fluoropolymer having a fluorine content of about 68 to 75%, said first fluoropolymer comprising a copolymer or terpolymer formed of two or more monomers selected from the group consisting of hexafluoropropylene, vinylidene fluoride and tetrafluoroethylene, and about 95 to 5 weight percent of a second fluoropolymer having a fluorine content of about 73 to 78%, said second fluoropolymer comprising a terpolymer of hexafluoropropylene, vinylidene fluoride and tetrafluoroethylene, wherein said first fluoropolymer exhibits elastomeric characteristics and said second fluoropolymer exhibits thermoplastic characteristics;

a second tubular structure formed around said first inner tubular structure, said second tubular structure comprising a fluorothermoplastic terpolymer of hexafluoropropylene, tetrafluoroethylene, and vinylidene fluoride; and

a protective cover, wherein one of said first tubular structure and said second tubular structure forms an inner barrier layer and the other of said first tubular structure and said second tubular structure forms a second layer around said inner barrier layer.

2. The hose of claim 1 wherein said first tubular structure forms said barrier layer and said second tubular structure forms said second layer around said inner barrier layer.

3. The hose of claim 1 further comprising a reinforcing layer between said second barrier layer and said protective cover layer.

4. The hose of claim 3 wherein said reinforcing layer is a layer of fibers selected from the group consisting of polyamide fibers, polyester fibers, rayon fibers, glass fibers and cotton fibers.

5. The hose of claim 4 wherein said fibers are polyamide fibers.

6. The hose of claim 1 further comprising an elastomer layer between said second tubular structure and said reinforcing layer.

7. The hose of claim 6 wherein said elastomer layer is selected from the group consisting of nitrile-butadiene rubber, epichlorohydrin rubber, and ethylene-acrylate rubber.

8. The hose of claim 7 wherein said elastomer layer is butadiene-acrylonitrile rubber.

9. The hose of claim 1 wherein said protective cover is a layer of synthetic elastomer selected from the group consisting of styrene-butadiene rubber, nitrile-butadiene rubber, chloroprene rubber, chlorinated polyethylene, chlorosulfonated polyethylene, epichlorohydrin-ethylene oxide copolymer, polyvinyl chloride, and blends thereof.

10. The hose of claim 9 wherein said protective cover is chlorinated polyethylene.

11. The hose of claim 1 wherein said inner barrier layer further comprises a conductive material.

12. The hose of claim 11 wherein said conductive material is carbon black.

13. A flexible hose having improved fuel vapor barrier properties, said fuel hose comprising:

a first inner tubular structure forming an inner barrier layer comprising a fluoropolymer barrier layer formed from a blend of about 5 to 95 weight percent of a first fluoropolymer having a fluorine content of about 68 to 74%, said first fluoropolymer comprising a copolymer or terpolymer formed of two or more monomers selected from the group consisting of hexafluoropropylene, vinylidene fluoride and tetrafluoroethylene, and about 95 to 5 weight percent of a second fluoropolymer having a fluorine content of about 73 to 78%, said second fluoropolymer comprising a terpolymer of hexafluoropropylene, vinylidene fluoride and tetrafluoroethylene, wherein said first fluoropolymer exhibits elastomeric characteristics and said second fluoropolymer exhibits thermoplastic characteristics;

a second tubular structure formed around said first inner tubular structure, said second tubular structure comprising a fluorothermoplastic terpolymer formed of hexafluoropropylene, tetrafluoroethylene, and vinylidene fluoride;

a reinforcing member which comprises natural or synthetic fibers selected from the group consisting of glass fibers, cotton fibers, polyamide fibers, polyester fibers, and rayon fibers; and

a protective cover which comprises a synthetic elastomer selected from the group consisting of styrene-butadiene rubber (SBR); butadiene-nitrile rubber such as butadiene-acrylonitrile rubber; chlorinated polyethylene; chlorosulfonated polyethylene; vinylethylene-acrylic rubber; acrylic rubber; epichlorohydrin rubber such as Hydrin 200; a copolymer of epichlorohydrin and ethylene oxide available from DuPont ECO; polychloroprene rubber (CR); polyvinyl chloride; ethylene-propylene copolymers (EPDM); ethylene-propylene-diene terpolymer (EPDM); ultra high molecular weight polyethylene (UHMWPE); high density polyethylene (HDPE); and blends thereof.

14. The hose of claim 13 wherein said first fluoropolymer is a hexafluoropolypropylene-vinylidene fluoride copolymer.

15. The hose of claim 14 wherein said fibers are polyamide fibers.

16. The hose of claim 13 wherein said synthetic elastomer is chloropolyethylene.

17. The hose of claim 13 further comprising an elastomeric material between said second tubular structure and said reinforcing member.

18. A method for the manufacture of a flexible fuel hose comprising the steps of:

extruding a first tubular structure comprising a blend of about 5 to 95 weight of a first fluoropolymer having a fluorine content of about 68 to 74%, with about 95 to 5 weight percent of a second fluoropolymer having a fluorine content of about 73 to 78%, said first fluoropolymer comprising a copolymer or terpolymer formed of two or more monomers selected from the group consisting of hexafluoropropylene, vinylidene fluoride and tetrafluoroethylene, and said second fluoropolymer comprising a terpolymer of hexafluoropropylene, tetrafluoroethylene, and vinylidene fluoride, wherein said first fluoropolymer exhibits elastomeric characteristics and said second fluoropolymer exhibits thermoplastic characteristics;

extruding a second tubular structure around said first tubular structure, said second tubular structure comprising a fluorothermoplastic terpolymer of hexafluoropropylene, tetrafluoroethylene, and vinylidene fluoride; and

applying a protective cover around said second extruded tubular structure.

19. The method of claim 18 further comprising the step of applying a reinforcing layer on said layer of elastomer material prior to applying said protective cover.

20. The method of claim 19 wherein said reinforcing layer is a layer of fibers selected from the group consisting of polyamide fibers, polyester fibers, rayon fibers, glass fibers, and cotton fibers.

21. The method of claim 20 wherein said reinforcing layer is a layer of polyamide fibers.

22. The method of claim 21 wherein said reinforcing fibers are applied on said second extruded tubular structure by spiraling.

23. The method of claim 18 further comprising the step of applying a layer of elastomer material selected from the group consisting of nitrile-butadiene rubber, epichlorohydrin rubber, and ethylene-acrylate rubber on said second extruded tubular structure prior to applying said reinforcing fibers.

24. The method of claim 23 wherein said elastomeric material is butadiene-acrylonitrile rubber.

25. The method of claim 18 wherein said protective cover is a synthetic elastomer selected from the group consisting of styrene-butadiene rubber, nitrile-butadiene rubber, chloroprene rubber, chlorinated polyethylene, chlorosulfonated polyethylene, epichlorohydrin-ethylene oxide copolymer, polyvinyl chloride, and blends thereof.

26. The method of claim 25 wherein said synthetic elastomer is chlorinated polyethylene.

27. The method of claim 16 wherein said protective cover is applied by cross head extruder.